

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A back light unit in a liquid crystal display, comprising:

a light guide plate; and

a light input device for directing a light path of a light beam substantially to a rear side of said light input device in a direction away from the light guide plate prior to directing said light path to a front side thereof and toward the light guide plate to obtain high focusing of the light beam, wherein the path of said light beam is entirely directed through a substantially non-solid medium, prior to being directed toward said light guide plate.

2. (Currently Amended) The backlight unit according to claim 1, wherein said light guide plate allows the light beam from the light input device to progress in the vertical direction of a liquid crystal panel.

3. (Currently Amended) The backlight unit according to claim 2, wherein the light input device includes:

a lamp for generating the light beam; and

a lamp housing having a reflective plate provided at an inner side thereof to direct a light path of the light beam generated from the lamp into the rear side thereof before directing the light beam toward the light guide plate.

4. (Currently Amended) The back light unit according to claim 3, wherein the reflective plate is formed to have a sectional view of spiral shape.

5. (Currently Amended) The back light unit according to claim 3, wherein the reflective plate is curved to obtain a desired vertical incident angle of the light beam progressing to the light-guide plate.

6. (Currently Amended) The back light unit according to claim 3, wherein the reflective plate is curved to have about $\pm 20^\circ$ to 30° in a vertical incident angle of the light beam progressing to the light-guide plate.

7. (Currently Amended) The back light unit according to claim 3, wherein the lamp housing includes at least one reflective plate for cutting off the light beam progressing directly from the lamp into the light-guide plate, the at least one reflective plate being protruded from the inner surface of the lamp housing.

8. (Currently Amended) The back light unit according to claim 3, wherein the light-guide plate includes a plurality of unit patterns formed on one side thereof in parallel with the lamp, the plurality of unit patterns allowing the

light beam from the lamp housing to be progressed perpendicularly into the liquid crystal panel.

9. (Currently Amended) The back light unit according to claim 8, wherein the unit pattern includes:

a land protruded at a desired incline from one surface of the light-guide plate; and

a groove extended from the land to have a desired incline.

10. (Currently Amended) The back light unit according to claim 9, wherein an angle between the one surface of the light-guide plate and the land is about 9° to 12° , an angle between the one surface of the light-guide plate and the groove is about 35° to 45° , wherein the groove has a height of about 3 to 5 times relative to the land, and the unit pattern is about 100 to $400\mu m$ in width.

11. (Currently Amended) The back light unit according to claim 8, wherein the unit pattern includes a groove having a sectional view of triangular shape.

12. (Currently Amended) The back light unit according to claim 11, wherein an angle between one surface of the light-guide plate and one surface of the groove is about 40° to 50°, and an angle between one surface of the light-guide plate and another surface of the groove is about 30° to 90°.

13. (Currently Amended) The back light unit according to claim 11, wherein the light-guide plate is disposed at the rear side of a transmissive liquid crystal panel, and the lamp housing directs the light beam from the lamp to the incident side of the light-guide plate disposed at the rear side of the transmissive liquid crystal panel.

14. (Currently Amended) The back light unit according to claim 13, further comprising a rear reflective plate for reflecting the light beam from the rear surface of the light-guide plate toward the transmissive liquid crystal panel.

15. (Currently Amended) The back light unit according to claim 14, wherein the light-guide plate includes a plurality of prism patterns arranged on another surface thereof in intersection with the unit patterns.

16. (Currently Amended) The back light unit according to claim 8, wherein the light-guide plate is disposed at the front side of a transmissive liquid crystal panel and the lamp housing directs the light beam from the lamp to the incident side of the light-guide plate disposed at the front side of the transmissive liquid panel.

17. (Currently Amended) The back light unit according to claim 16, wherein a distance between the start point and the angular point of the land is within 200 μ m.

18. (Currently Amended) The back light unit according to claim 8, wherein a distance between the unit patterns get gradually shorter as said unit patterns get further away from the incident side of the light-guide plate.

19. (New) A back light unit in a liquid crystal display comprising:
a light guide plate; and
a light input device for directing a light path from a light source toward the light-guide plate, wherein the light from the light source passed through the light input device to be incident into the light-guide plate without being incident directly to the light-guide plate.